

Review to the revised version of the manuscript 'Three-dimensional hydrodynamic lake simulations of avalanche-generated impulse wave dynamics for potential GLOF scenarios at Lake Palcacocha, Peru' (now named 'Dynamics of avalanche-generated impulse waves: three-dimensional hydrodynamics simulations and sensitivity analysis') submitted by Rachel E. Chisolm and Daene C. McKinney to NHES.

I'm glad to report that the authors have considered and replied to all issues arose by the reviewers and have edited their manuscript accordingly, leading to the substantial improvement. Most importantly, the authors have stressed rationale and the novelty compared to the paper of Somos-Valenzuela et al. (2016), have structured and extended the discussion section and conclusions and have explained unobvious statements in more detail. The authors have also reflected most of the minor comments and suggestions. I only have few minor comments and suggestions (see below).

Minor specific comments and technical notes:

P4L29: technically, the mitigation measure applied at the dam of Lake Palcacocha is not a tunnel, but the combination of open cut and artificial dam

P6L4: Mergili et al. (2017) is not in the list of references; r.avaflow has already been sucessfully employed to simulate GLOF process chain in the Cordillera Blanca (2012 event in Santa Cruz; see also <http://onlinelibrary.wiley.com/doi/10.1002/esp.4318/full>)

P16L20: 'as the water surface level is lowered, the total volume stored in the lake increases' - please check

P21L19-21: some passages are repeating, please check

P21L31: cannot be quantified using given approach

To sum up, it's my pleasure to recommend the current version of the manuscript for the publication after minor revisions.

Kind regards

Adam Emmer